

SDMS Document ID



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TO: BONNIE LAVELLE
FAX: 303-312-6897

FROM: LOUISE SMART

DRAFT AGENDA
July 20 VASQUEZ/I-70 Working Group Meeting
8:30 AM to 3:00 PM
Swansea Recreation Center

AGENDA ITEMS

Community issues *1 1/2 hr*

Draft Risk Assessment *1 hr*

Status of Removal Plans
[Added by Celia VanDerLoop]

Update on ATSDR Public Health Assessment and other activities

- Update on Public Health Assessment
- Environmental Health Intervention Project
- Exposure investigation (urine and hair)
- Coordination with CDPHE blood lead program for blood lead testing
- Indoor dust sampling effort
- Soil pica health education activity
- Health effects education activity

[David wrote: "I'm guessing this will take at least an hour"]

Environmental Justice

NO
Update from Brenda South on VB/I-70 project

includes
Inhalation as a pathway of exposure (what studies are being done and how it affects people)

Draft Community Involvement Plan

Update on Operable Unit 2
[Marc said he needs 15 minutes]

VBI70 Health Team Meeting
July 18, 2000

Purpose: To review status of various public health activities

Agenda:

- ✓ Introductions
- ✓ Additions to agenda
- ✓ Update on PHA (David)
 - significant changes
 - number of properties that are urgent public health threat
 - number of properties that are public health threat
 - quantitative appendix
 - date for planned initial release to agencies
 - review of new GIS maps
 - review of estimating maximum arsenic concentration using a composite concentration
 - photographs of arsenical skin conditions
 - possibly add to PHA
 - health education for residents
- ✓ Daycare centers (Stephanie)
- ✓ Environmental Health Intervention Project (David or Norys)
 - review status of activities
 - locations, date, and time for availability sessions
 - outreach activities
 - fact sheet (English and Spanish)
 - letter to health care providers
- ✓ Exposure Investigation (Rubina)
 - status of activity
 - fact sheet
 - locations, date, time for urine and hair collection
 - transportation
 - outreach for residents who do not show up
 - dates
 - teams
 - coordination with CDPHE for blood leads (David)
 - referral of properties to CDPHE
 - CDPHE attendance at locations
- ✓ Indoor dust sampling plan (David)
 - review of planned sampling
 - who will collect samples
 - coordination with urine and hair collection dates
 - educational materials
- ✓ Soil pica fact sheet (David)
- ✓ Arsenic health effects fact sheet (David)
- ✓ Division of Health Studies (David)

ATSDR Activities:

Public Health Assessment (PHA) is expected to be released for Working Group review in late August. The modifications PHA will include a quantitative section (this is not standard for ATSDR health assessments; they are commonly qualitative). The PHA will identify those properties considered by ATSDR to present an "Urgent Public Health Threat" and those considered by ATSDR to present a "Public Health Threat".

ATSDR mapped the Phase IIIa soil sampling results and shared the maps with the working group. The concentration mapped for each property is the average of the three composite samples collected by EPA. ATSDR is using these maps for two purposes, (1) to understand the source of contamination and (2) to determine if EPA has sampled in the right areas. ATSDR's observations:

- No pattern of arsenic concentrations is observed when concentrations up to 660 ppm are mapped.
- A pattern is suggested when maps are prepared of only arsenic concentrations below 23 ppm and distributed in 3 ranges chosen by ATSDR. There appears to be more homes at the upper end of this range (near 23ppm) in the western portion of the study area.

To further explore the distribution, ATSDR calculated the ratios of the number of residences with average arsenic concentrations in ranges of 12-17, 18- 23, 24-29, and 30-35 to the number of residences with average arsenic in the range 0-11. These ratios were calculated by neighborhood. The ratio is higher in South Globeville, Elyria, and Cole.

The Working Group comments on this work were:

- ATSDR chose to map arsenic concentration ranges within the background range of the area. The maps imply "contamination" when the ranges illustrated may be within the normal variability of background and are likely influenced by sampling and analytical variability.
- A suggestion was made that any future mapping focus on concentration ranges that have some significance to human health risk. It may be better to wait until the PHA and the baseline risk assessment are final to make statements about the health significance of the sampling data.
- Concern was expressed that ATSDR's choice of concentration ranges that were mapped may cause undue alarm in the community.
- Presentation of sampling results in the form of maps is considered to be very useful in understanding the data. The community believes the maps show a greater willingness on the part of ATSDR to share information.

- A request was made that ATSDR discuss its approach to interpreting sampling data (such as the mapping) with the working group before undertaking such work.
- Interpretations of the soil data should take into account sampling density, soil type, and the form of arsenic (using speciation techniques) before making any conclusions about the pattern of contamination.
- It is appropriate for EPA as the regulatory agency to investigate the source of contamination and this work is ongoing in the Pilot Scale Study. For the purpose of assessing human health risks in the PHA and the baseline risk assessment, the "source" within the exposure pathway (source, release, transport, exposure point, and receptor) is the lead and arsenic in yard soils.
- The United States Geological Survey has collected a lot of soil samples along the Front Range along a mile grid pattern. The data shows that the closer you get to Denver, the higher lead levels are observed. Higher lead levels are observed in older parts of the city. The central question in interpreting soil data is, at what level does it become a problem to human health? USGS data indicates that background arsenic levels may be in the 30ppm -40 ppm range.

ATSDR presented their suggested approach to predicting "hot spots" using the Phase III composite soil sampling data. This approach, which relies on data from the intensively sampled homes, is an alternative to the approach described in EPA's Project Plan for the Phase III soil investigation which was developed by the working group in August, 1999. In order to consider ATSDR's alternative approach, the working group will need to review it in detail and have a technical discussion. The Phase III program and EPA's risk assessment have been implemented using the approach described in the Phase III project plan, not the new approach now suggested by ATSDR. EPA has identified properties with potential for hot spots using the approach detailed in the Phase III project plan and is currently re-sampling these by collecting 30 individual samples at each. This data will reveal if there are actually "hot spots" as defined in the baseline risk assessment. This data will be provided to the Working Group once it is validated.

ATSDR next described their planned health intervention and health education activities:

Availability Sessions: August 22, 2000, 6pm -9pm
August 23, 2000, 10am -2pm

The purpose of these sessions is to hear community's concerns. ATSDR plans to have a physician at these sessions. Both will be at the Swansea Recreation Center. There may be other sessions at a later date in the Cole neighborhood.

Biological Testing: In Cole and Clayton,
August 21, 2000, 10am -2pm, pick up cup and collect hair
August 22, 2000, 4pm - 7pm, drop off urine samples

In Swansea/Elyria,
August 22, 2000, 6pm -9pm, pick up cup and collect hair
August 23, 2000, 10am -2pm, pick up cup and collect hair
4pm -7pm, drop off urine samples
August 24, 2000, 10am -2pm, drop off urine samples

The population targeted for biological testing is those residents living at properties with arsenic soil levels of 100 ppm or greater. ATSDR will send out letters to the targeted population notifying them of the offer. At the same time, CDPHE intends to conduct blood lead sampling in the area. They will send out separate letters but the letters need to go out at the same time. As part of its exposure investigation, ATSDR intends to sample indoor dust at the targeted homes with children. ATSDR has asked for the assistance of EPA's Emergency Response Team in New Jersey. EPA expressed concern that Region 8 had not been consulted in this sample collection effort and that the dust collection protocols must be comparable to those used by Region 8 in the Phase III program.

As part of their health education efforts, ATSDR is planning to prepare two facts sheets. The first will be on soil pica behavior and the second will be on the health effects of exposure to arsenic.